On page 7, line 6, please insert after "CVD of Cu" – as shown in Figure 11 --.

On page 8, line 15, please delete "58" and insert – 68 – therefor.

IN THE CLAIMS:

Please amend the claims as follows:

1. (Amended) A method of filling a feature formed in [hole through] a dielectric layer [in an integrated circuit], comprising:

a) depositing a generally conformal first barrier layer in the feature [hole];

b) removing the first barrier layer formed on the bottom of the feature [hole];

c) sputter depositing a second barrier layer under conditions of a high density plasma, wherein the second barrier layer comprises a material selected from a group consisting of Ta, TaN, TaSiN, TiSiN, and combinations thereof; and

d) depositing a metal layer in the feature [hole], wherein the metal layer comprises copper.

2. (Amended) The method of claim 1, wherein the first barrier layer is deposited using chemical vapor deposition techniques.

3. (Amended) The method of claim 2, wherein the first barrier layer is comprised of Si_xN_y.

4. (Amended) The method of claim 3, wherein [a portion of] the first barrier layer formed on the bottom of the feature [hole] is removed using etching techniques.

5. (Amended) The method of claim 4, wherein the metal layer deposited in the feature [hole] is copper.

6. (Amended) The method of claim 5, wherein the metal layer is deposited using chemical vapor deposition techniques.

7. (Amended) The method of claim 5, wherein the metal layer is deposited using physical vapor deposition techniques.

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8. (Amended) The method of claim 1, wherein the first barrier layer comprises Si_xN_y.

9. (Canceled) The method of claim 8 wherein the second barrier layer comprises a material selected from the group consisting of Ta, TaN, TaSiN, TiSiN and combinations thereof.

10. (Canceled) The method of claim 9 wherein the metal layer sputter deposited in the hole is copper.

11. (Amended) The method of claim 1 [10], wherein the second barrier layer is sputter deposited under the conditions of a high density plasma.

12. (Amended) The method of claim 11, wherein the metal layer is sputter deposited under the conditions of a high density plasma.

13. (Amended) The method of claim 12, wherein the metal layer is heated to a temperature of between about room temperature and about 500°C and then subjected to a pressurized environment.

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14. (Amended) The method of claim 13, wherein the pressurized environment is in the range of about 1000 psi to about 100,000 psi.

15. (Amended) A method of [filling] forming a feature [hole through] in a dielectric layer [in an integrated circuit], comprising:

a) depositing a first barrier layer over a blanket dielectric layer;

b) forming a feature [hole] through the barrier layer and the dielectric layer to expose an underlayer;

c) depositing a second generally conformal barrier layer in the feature [hole];

d) removing the barrier layer formed at the bottom of the feature [hole];

e) selectively depositing a metal layer on the underlayer exposed in the feature [hole].

16. (Amended) The method of claim 15, wherein the first barrier layer and the second barrier layer[s] are comprised of Si_xN_y.

17. (Amended) The method of claim 16, wherein the first barrier layer and the second barrier layer[s] are formed using chemical vapor deposition techniques.

18. (Amended) The method of claim 17, wherein the barrier layer formed on the bottom of the feature [hole] is removed by sputter etching techniques.

19. (Canceled) An integrated processing tool, comprising:

a central transfer chamber having a robot assembly disposed at least partially therein for moving substrates;

a chemical vapor deposition chamber for depositing Si_xN_y;

a high density plasma physical vapor deposition chamber connected to the transfer chamber having a target comprising tantalum;

an etch chamber capable of achieving a high density plasma; and

a high density plasma physical vapor deposition chamber connected to the transfer chamber having a target comprising copper.

20. (Amended) The method of claim 5, wherein the metal layer is deposited by first depositing a wetting layer using chemical vapor deposition techniques and then filling the feature [hole] using physical vapor deposition techniques.